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| APPLICATION NO. FILING DATE               |                            | ING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |  |
|---|----------------------------|--------------|----------------------|-------------------------|------------------|--|--|
| 10/803,408                                | 03,408 03/17/2004          |              | Lawrence T. Clark    | 42P7182DC               | 5557             |  |  |
| 8791                                      | 7590                       | 10/28/2004   |                      | EXAM                    | EXAMINER         |  |  |
|   |                            | OFF TAYLOR & | NGUYEN, VIET Q       |                         |                  |  |  |
| 12400 WILSHIRE BOULEVARD<br>SEVENTH FLOOR |                            |              |                      | ART UNIT                | PAPER NUMBER     |  |  |
| LOS ANGE                                  | LOS ANGELES, CA 90025-1030 |              |                      | 2818                    |                  |  |  |
|   |                            |              |                      | DATE MAILED: 10/28/2004 | ļ                |  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summers  |   | Application No.   | Application No. Applicant(s)   |                      |  |  |  |  |
|--|---|---|--|----------------------|--|--|--|--|
|  |   | 10/803,408  | CLARK ET AL.   |                      |  |  |  |  |
|  | Office Action Summary   | Examiner  | Art Unit   |                      |  |  |  |  |
|  |   | Viet Q Nguyen   | 2818   |                      |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |   |  |                      |  |  |  |  |
| THE  <br>- Exter<br>after<br>- If the<br>- If NO<br>- Failu<br>Any (   | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION.  SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may bly within the statutory minimum of twill expire SIX (6) Mee. cause the application to become | a reply be timely filed  hirty (30) days will be considered time  ONTHS from the mailing date of this of  ABANDONED (35 U.S.C. § 133). | ly.<br>ommunication. |  |  |  |  |
| Status   | •   | •   |  |                      |  |  |  |  |
| 1)⊠  | Responsive to communication(s) filed on App   | lication filed on 3/17/200  | <u>4</u> .   |                      |  |  |  |  |
| 2a)□   | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |   |  |                      |  |  |  |  |
| 3) 🗌   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |   |  |                      |  |  |  |  |
| Disposition of Claims  |   |   |  |                      |  |  |  |  |
| 5)□<br>6)⊠<br>7)⊠  | <ul> <li>✓ Claim(s) 1-8 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>☐ Claim(s) is/are allowed.</li> <li>✓ Claim(s) 1.2 and 4 is/are rejected.</li> <li>✓ Claim(s) 3 and 5-8 is/are objected to.</li> <li>☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>  |   |  |                      |  |  |  |  |
| Applicat   | ion Papers  | •   |  |                      |  |  |  |  |
| 9) The specification is objected to by the Examiner.   |   |   |  |                      |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |   |   |  |                      |  |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |                      |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |   |  |                      |  |  |  |  |
| Priority (   | under 35 U.S.C. § 119   |   |  |                      |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |   |  |                      |  |  |  |  |
| 2) Notion (3) Infor  | ot <b>(s)</b> ce of References Cited (PTO-892)  ce of Draftsperson's Patent Drawing Review (PTO-948)  rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/06  er No(s)/Mail Date 3/17/2004.   | Paper N   | w Summary (PTO-413)<br>No(s)/Mail Date<br>of Informal Patent Application (P1   | FO-152)              |  |  |  |  |

## **DETAILED ACTION**

Claims 1-8 are present for examination.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ng et al (6,700,809) and Hughes et al (6,691,252) and Adams et al (5,740,098).

Ng et al (see Fig.6) clearly shows the use of a CAM memory device (shown as HASH index generator 131) for generating addressing signals (136) to select particular memory row of memory array (201). Col. 11 (lines 5-10) further stated that "Fig.8 illustrates address selection logic 235 which, through not shown in Fig.6, may be included within the hash CAM device to enable selection of memory addresses from different sources. For example, addresses may be provided via address bus 230 (e.g., to enable testing of the memory array 201)". Thus, it would have been obvious to one skilled in this art that sequential addresses could be feed from this CAM device into the memory array (201) or for any other portion of CAM array for any testing purposes, and the claimed steps of "using a plurality of CAM cells as a decoder" and "algorithmically

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testing a second plurality of memory cells of the array based on the addresses provided by the CAM cells" could have been been similarly made by the above suggestion found in Ng et al reference.

Hughes et al (see Fig.7) shows the use of a CAM memory device (701) for generating stored addresses in order to test a particular memory cell array under the instructions from the BIST test device (703). Fig. 9 (read also cols.9-10) also discloses the testing steps, 803 through 808, for using CAM (701) to algorithmically testing a second plurality of memory cells from the memory array (802). Particularly, col.10 (lines 34-42) mentioned that the MATCH signals form CAM device (in case of no stored addresses in CAM matching the testing location) would be used to write test data into designated memory cells at step 804, see lines 42-61), thus obviously suggests the claimed steps of "algorithmically testing a plurality of memory cells based on addresses provided by the CAM cells."

Adams et al (see Fig.2) clearly shows the use of a CAM memory device (10) for generating addresses on the functional path (24), and selected by the multiplexer (MUX 26), and then finally to be used as decoded address to test the cache memory unit (DCU 12). Thus, it would have been obvious that such testing is algorithmically determined base don the addresses provided by the plurality of CAM cells (10) as recited.

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## **Double Patenting**

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3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

4. Claim 1 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 4, 5, and 6 of prior U.S. Patent No. 6,744,655 (Clark et al). This is a double patenting rejection.

The claim 1 of this instant application contains identical language as included in claims 1, 4, 5, and 6 of the above patent.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims **1, 2, and 4** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim **7** of U.S. Patent No. **6,744,655** (Clark et al).

Claim 1 and 2 contain identical language included in claim 7 of the above patent (as mentioned above).

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Claim 4 does not exactly contain the same wording as found in claim 7 of the patent. However, although the conflicting claims and/or wordings are not identical, they are not patentably distinct from each other because the recited wordings of the two inventions are drawn toward an identical claimed structure, thus obviates this double patenting rejection for claim 4.

Other claims contain allowable subject matter over prior arts of record.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q Nguyen whose telephone number is (571) 272-1788. The examiner can normally be reached on 7am-6pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (703) 308-4910. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Viet Q Nguyen

**Primary Examiner** 

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V. Nguyen

10/25/2004